

Bridge to Algebra

Bridge to Algebra's curriculum is based on 20 years of research at Carnegie Mellon Univ. The classroom covers the five middle school content strands identified in the NCTM standards (number, geometry, measurement, probability, statistics, and algebra) and emphasizes problem solving and mathematical literacy. Throughout the curriculum, explicit connections are made between different representations, such as fractions, decimals, and percents. Classroom activities address both mathematical content and process standards. Students engage in problem solving, communication and reasoning while making connections using multiple representations. The textbook provides an opportunity for extended investigations, analysis and alternate solution paths. Real-world situations are used in problems designed to emphasize connections between verbal, numeric, graphic and algebraic representations. The classroom environment promotes discourse, collaborative work and depth of understanding.

Curriculum is correlated to the Kentucky Program of Studies and Core Content for Assessment 4.1. In 2007, the curriculum was recognized by the Kentucky Committee for Mathematics Achievement as the top rate middle school program. Bridge to Algebra is also supported by a comprehensive Professional Development plan.

Contract Price

\$76.00

Grade

5,6,7,8

TYPE

P2

Copyright

2008

Author

Carnegie Learning, Inc.

Edition

2008

Content

Pre Algebra

Readability

Lexile = 920

Accessibility

Nimas

Research

www.carnegielearning.
com/approach_research.cfm

Teacher Edition

9781934800089

\$85.00

Bridge to Algebra Teacher Edition

Essential Items

9781934800010

Nimas

Bridge to Algebra Student Assignments

9781934800065

Nimas

Bridge to Algebra Homework Helper

Ancillary Items

9781934800096

Section 508

\$271.20

Bridge to Algebra Cognitive Tutor Software

Free with Purchase items

Evaluation Tool for Basal Instructional Materials
Mathematics (2009 – 2015)

Provided by the Publisher	ISBN	9781934800072	Publisher -	Carnegie Learning, Inc.	Provided by the Publisher	
	Bridge to Algebra					
	Type - P2	Author - Carnegie Learning, Inc.				
	Copyright - 2008	Edition - 2008	Readability -	Lexile = 920		
	Course - Pre Algebra		Grade(s) -	5,6,7,8		
Teacher Edition ISBN if applicable..... 9781934800089						

Overall Recommendation:

Recommended as BASAL

Overall Strengths, Weaknesses, Comments:

if this box is not checked, the evaluators have
chosen NOT recommend as basal

The Bridge to Algebra program was reviewed as a fifth grade program that has gaps mentioned in the below criteria. We see overall strengths in the program for middle school students who need a program that offers a diverse way of learning to be successful.

NIMAC Accessibility N
Ancillary Yes
Free with Purchase No
Research Yes www.carnegielearning.com/approach_research.cfm

Bridge to Algebra's curriculum is based on 20 years of research at Carnegie Mellon University. The classroom covers the five middle school content strands identified in the NCTM standards (number, geometry, measurement, probability, statistics, and algebra) and emphasizes problem solving and mathematical literacy. Throughout the curriculum, explicit connections are made between different representations, such as fractions, decimals, and percents. Classroom activities address both mathematical content and process standards. Students engage in problem solving, communication and reasoning while making connections using multiple representations. The textbook provides an opportunity for extended investigations, analysis and alternate solution paths. Real-world situations are used in problems designed to emphasize connections between verbal, numeric, graphic and algebraic representations. The classroom environment promotes discourse, collaborative work and depth of understanding.

CRITERIA

This basal resource ...

A. Encompasses KY Content Standards & Grade Level Expectations	Moderate Evidence
---	--------------------------

Text is designed to be used in an elective course outside the Program of Studies

1) Includes the 5 Big Ideas of mathematics to the following extent:

- | | |
|-------------------------------------|-----------------------|
| a) Number Properties and Operations | Moderate Evidence |
| b) Measurement | Moderate Evidence |
| c) Geometry | Moderate Evidence |
| d) Data Analysis and Probability | Moderate Evidence |
| e) Algebraic Thinking | Little or No Evidence |

2) Addresses content-specific enduring understandings from the related Program of Studies standards.

Moderate Evidence

3) Addresses content-specific skills and concepts from the related Program of Studies standards.

Little or No Evidence

4) Content addressed is current, relevant and non-trivial

Strong Evidence

Evaluation Tool for Basal Instructional Materials
Mathematics (2009 – 2015)

5) Provides opportunities for critical thinking/reasoning	Strong Evidence
6) Strengths, Weaknesses, Comments: <ul style="list-style-type: none"> • Specific strengths-which areas/concepts are covered exceptionally well? • Specific weaknesses-which areas/concepts would likely require supplementing? <p>From a fifth grade point of view the materials covered were fifth through eighth grade; so there was a lack of basic foundation and skill review and development for fifth graders. The Number Properties and Operations strands referenced Place Value in relation to decimals only and basic operation skills could not be found. In the Measurement strand we could not find Time or Elapsed Time. In the Geometry strand we could not find Line Symmetry. In Data Analysis and Probability we could not find Venn Diagrams, Pictographs and Line Plots. In Algebraic Thinking basic patterns were missing using number, picture and symbol representations.</p>	
B. Functionality & Suitability	Moderate Evidence
1) Suitability	Moderate Evidence
<ul style="list-style-type: none"> • Should be suitable for use with a diverse population and is free of bias regarding race, age, ethnicity, gender, religion, social and/or geographic environment; is free of stereotyping or bias of any kind. 	
2) Content quality	Moderate Evidence
<ul style="list-style-type: none"> • Free from factual errors • Content is presented conceptually when possible—more than a mere collection of facts • Content included accurately represents the knowledge base of the discipline • Theories/scientific models contained represent a broad consensus of the scientific community • Interconnections among mathematical topics 	
3) Connections to Literacy	Moderate Evidence
<ul style="list-style-type: none"> • Employs a variety of reading levels and is grade/level appropriate • Use of multiple representations-concrete, visual/spatial, graphs, charts, etc. • Provides opportunities for summarizing, reviewing, and reinforcing vocabulary skills and concepts at multiple levels of difficulty for a variety of learning styles. • Student text provides opportunity to integrate reading and writing • Uses vocabulary that is age and content appropriate • Focuses on critical vocabulary vs. extensive lists • Identifies key vocabulary through definitions in both text and glossary • The text is engaging and facilitates learning • Embedded activities enhance the understanding of the text <p><i>Note: may apply to either student or teacher editions</i></p>	
4) Connections to Technology	Little or No Evidence
<ul style="list-style-type: none"> • Integrates technology and reflects the impact of technological advances • Uses technology in the collection and/or manipulation of authentic data • Embeds web links as a mathematics resource. 	
5) Support for Diverse Learners	Moderate Evidence
<ul style="list-style-type: none"> • Provides support for ESL students • Provides support for differentiation of instruction in diverse classrooms • Challenge for gifted and talented students • Support for students with learning difficulties <p><i>Note: may apply to either student or teacher editions</i></p>	
6) Strengths, Weaknesses, Comments:	
<ul style="list-style-type: none"> • Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards. 	

Evaluation Tool for Basal Instructional Materials
Mathematics (2009 – 2015)

The functionality and Suitability for fifth students is very limited. This program is most suitable for 6th – 8th grade. The collaborative model that the program is designed for does not support the elementary school setting allowing students the independence of a 60%/40% text base and computer supported learning. Very little differentiated instruction throughout the program. We requested the technology component “Cognitive Tutor Software”, but were unable serial number for viewing.

C. Supports Inquiry and Skill Development	Moderate Evidence
--	--------------------------

1) Promotes Inquiry, research and Application of Learning

Strong Evidence

- Provides opportunities for inquiry and research that includes activities such as gathering information, researching resources, observing, interviewing, and evaluating information, analyzing and synthesizing data and communicating findings and conclusions, formulating authentic questions to deepen and extend mathematical reasoning.
- Requires students to use higher-level cognitive skills (analysis, synthesis, evaluation, generalizing, justifying, etc.)
- Provides activities and projects for students to deepen their knowledge and cultivate and strengthen problem-solving and decision-making skills.
- Provides opportunities for application of learned concepts.
- Uses a variety of relevant charts, graphs, diagrams, number lines, and other illustrations to invite and motivate students to engage in discussion, problem solving, and other high-order thinking skills.
- Emphasizes conceptual understandings that invite students to predict, conclude, evaluate, develop and extend ideas to support reasoning.

Note: may apply to either teacher or student edition

2) Skill Development

Moderate Evidence

- Provides opportunities to make sense of all mathematics
- Provides opportunities to recognize, create, and extend patterns.
- Provides opportunities for critical thinking and reasoning.
- Provides opportunities to justify/prove responses.
- Provides opportunities to ask deeper questions.
- Contains embedded activities (or extensions) that emphasize use of technology for problem solving

Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

Program is weak in basic computational skills creating and extending number and picture patterns.

D. Supports Best Practices of Teaching and Learning	Moderate Evidence
--	--------------------------

1) Engages Students

Moderate Evidence

- Includes content geared to the needs, interests, and abilities of all students
- Engages and motivates students using components such as real-life situations, simulations, experiments, and data gathering.
- Includes information and activities that assist students in seeing relevance of concepts (where appropriate) to their own lives and experiences
- Provides a variety of strategies, activities, and materials to enhance student learning at the appropriate learning levels
- Activities are truly congruent to the concepts addressed, not merely correlated

Note: may apply to either teacher or student edition

2) Uses Assessment to Inform Instruction

Strong Evidence

- Includes multiple means of assessment as an integral part of instruction
- Provides evaluation measures in the teacher edition that supports differentiated learning activities
- Embedded assessments reflect a variety of Depth of Knowledge levels

Evaluation Tool for Basal Instructional Materials
Mathematics (2009 – 2015)

Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards

Program does not support the elementary best practices of teaching and learning. Students do not have the independence to allow the program to be successful for them.

E. Has an Organization/ Format that Supports Learning and Teaching **Moderate Evidence**

1) Organizational Quality

Moderate Evidence

- Print and/or electronic materials present minimal barriers to learners, but also add encouragement for students to stretch and make further explorations.
- Presents chapters/lessons in an organized and logical sequence
- Provides clearly stated objectives for each lesson.
- Uses text features (e.g., titles, headings, subheadings, review questions, goals, objectives, space, print, type size, color) to enhance readability.
- Makes use of various forms of media (e.g., CD's, recordings, videos, cassette tapes, computer software, web-based components, interactive software, calculators, physical and virtual manipulatives) as either student or teacher resources
- Includes clear, accurate, appropriate and clearly explained illustrations and/or graphics that reinforce content standards.
- Incorporates a glossary, footnotes, recordings, pictures, and/or tests that aid pupils and teachers in using the book effectively
- Uses grade-appropriate type size
- Included media are durable, easy to use and have technical merit
- Construction appears to be durable and able to withstand normal use

2) Essential Components (beyond student and teacher text)

Moderate Evidence

- Items identified as essential components support the learning goals and concept coverage of the basal

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

[Click here to enter text.](#)

F. Has available Ancillary/ Gratis Materials

Note: The decision whether to recommend or not recommend this resource as a basal should not be influenced by Section F **Little or No Evidence**

1) Ancillary/Gratis Materials

- Coordinates teacher resources easily with student material (e.g., accompaniments included, student pages shown, instructional technology indicated).
- Are well-organized and easy to use
- Provide substantive learning opportunities and are congruent with student learning goals
- Provide opportunities for high-level thinking, assessment, and/or problem solving
- Provides opportunities for intervention.

2) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

[Click here to enter text.](#)